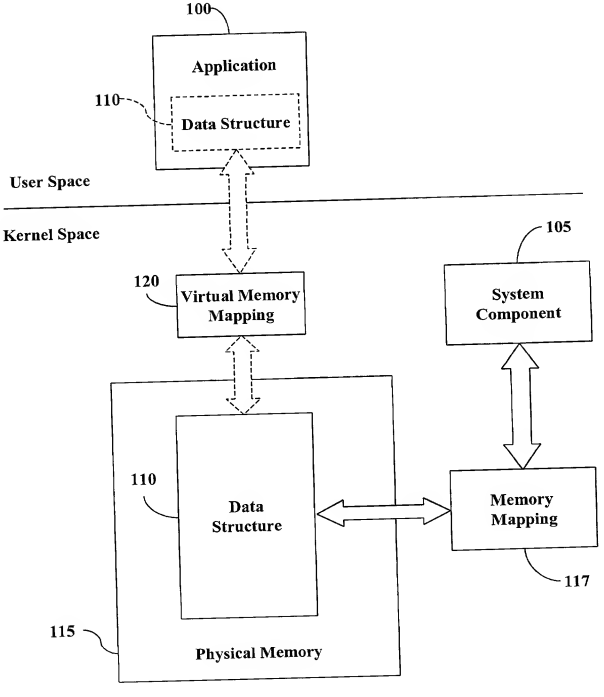
100
Application
110
Data Structure
User Space
Kernel Space
105
System Component
120
Virtual Memory Mapping
110
Data Structure
Memory Mapping
117
115
Physical Memory

Figure 1

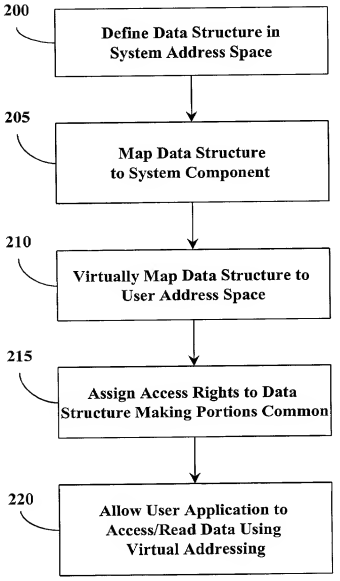
200
Define Data Structure in System Address Space
205
Map Data Structure to System Component
210
Virtually Map Data Structure to User Address Space
215
Assign Access Rights to Data Structure Making Portions Common
220
Allow User Application to Access/Read Data Using Virtual Addressing

Figure 2

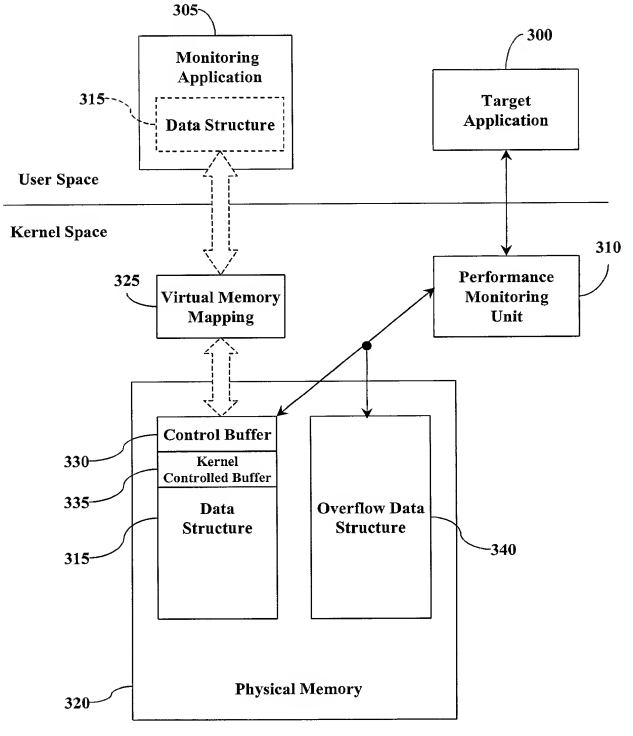
305
Monitoring Application
315
Data Structure
300
Target Application
User Space
Kernel Space
310
Performance Monitoring Unit
325
Virtual Memory Mapping
330
Control Buffer
Kernel Controlled Buffer
335
Data Structure
315
Overflow Data Structure
340
320
Physical Memory

Figure 3

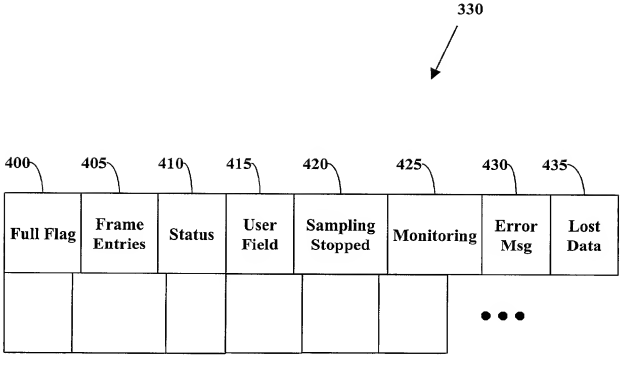
330
400
405
410
415
420
425
430
435
Full Flag
Frame Entries
Status
User Field
Sampling Stopped
Monitoring
Error Msg
Lost Data

Figure 4